WHAT IS CLAIMED IS:

1. A manufacturing method of a molybdenum-metal alloy nitride layer by a reactive sputtering using argon gas and nitrogen gas as a reactive gas mixture:

wherein a target for the reactive sputtering is made of molybdenum alloy comprising a metal of 0.1 to less than 20 atm %, and inflow amount of the nitrogen gas is at least 50% of the inflow amount of the argon gas.

2. The method of the claim 1, wherein the metal is one selected from the group consisting of tungsten, chromium, zirconium and nickel.

3. A molybdenum-metal alloy nitride layer manufactured by the method of claim 2.

Sub Q15 4. A wire for a display liquid display comprising:

a main layer made of either molybdenum or molybdenum alloy;

a supplementary layer which is located either on or under the main layer and made of either molybdenum nitride or molybdenum alloy nitride.

5. The wire of claim 4, wherein the supplementary layer comprises one selected from the group consisting of tungsten, chromium, zirconium and nickel.

6. A manufacturing method of a wire for a liquid crystal display comprising the steps of:

depositing a first layer made of either molybdenum or molybdenum alloy on a substrate;

depositing a second layer made of either molybdenum nitride or molybdenum alloy nitride by using reactive sputt ring; and

patterning simultan ously the second and the first layers.

7. The manufacturing method of claim 6, wherein a target for the reactive sputtering is made of either molybdenum or molybdenum alloy, and

the molybdenum alloy comprises one selected from tungsten, chromium, zirconium and nickel of 0.1 to less than 20 atm %

8. The manufacturing method of claim 7, wherein a reactive gas mixture for the reactive sputtering includes argon gas and nitrogen gas, and the nitrogen gas inflow amount of the nitrogen gas is at least 50% of the inflow amount of the argon gas.

9. The manufacturing method of claim 8, wherein the thickness of the second layer is 300 to 1,000 Å.

10. A manufacturing method of a wire for a liquid crystal display comprising the steps of:

depositing a first layer made of either molybdenum nitride or molybdenum alloy nitride by using reactive sputtering;

depositing a first layer made of either molybdenum or molybdenum alloy on a substrate; and patterning simultaneously the second and the first layers.

11. The manufacturing method of claim 10, wherein a target for the reactive sputtering is made of either molybdenum or molybdenum alloy, and

the molybdenum alloy comprises one selected from tungsten, chromium, zirconium and nickel of 0.1 to less than 20 atm %.

12. The manufacturing method of claim 11, wherein a reactive gas mixture for the reactive sputtering includes argon gas and nitrogen gas, and the nitrogen gas inflow amount of the nitrogen gas is at least 50% of the inflow amount of the argon gas.

13. The manufacturing method of claim 12, wherein the thickness of the first layer is 300 to 1,000 Å.

Sub a14

14. A display liquid display comprising:

an insulating substrate;

a gate wire formed on the substrate;

a gate insulating layer covering the gate wire;

a data wire which is made of one of either molybdenum or molybdenum alloy and formed on the gate insulating layer;

a supplementary data wire which is located either on or under the data wire and made of either molybdenum nitride or molybdenum alloy nitride;

a passivation layer formed on the data wire or the supplementary data wire; and

an ITO pixel electrode formed on the passivation layer and connected to the data wire through contact formed in the passivation layer.

15. The liquid crystal display of claim 14, wherein the supplementary data wir comprises on selected from the group consisting of tungsten, chromium, zirconium and nickel.

16. The liquid crystal display of 17, further comprising:

a supplementary gate wire which is located either on or under the gate wire and made of either molybdenum nitride or molybdenum alloy nitride.

17. The liquid crystal display of claim 18, wherein the supplementary gate wire comprises one selected from the group consisting of tungsten, chromium, zirconium and nickel.

18. A manufacturing method of a liquid crystal display comprising the steps of:

forming a gate wire on a substrate;

forming a gate insulating layer on the gate wire;

forming a semiconductor layer on the gate insulating layer;

depositing a first layer made of either molybdenum or molybdenum alloy;

depositing a second layer made of either molybdenum nitride or molybdenum alloy nitride by using reactive sputtering method;

patterning simultaneously the second and the first layer to form a data wire and a supplementary data wire;

forming a passivation layer on the data wire or the supplementary data wire; and

forming a pixel electrode made of ITO.

19. The manufacturing method of claim 18, wherein a target for the reactive sputtering is made of either molybdenum or molybdenum alloy, and

the molybdenum alloy comprises one selected from tungst n,

chromium, zirconium and nickel of 0.1 to less than 20 atm %.

20. The manufacturing method of claim 21, wherein a reactive gas mixture for the reactive sputtering includes argon gas and nitrogen gas, and the nitrogen gas inflow amount of the nitrogen gas is at least 50% of the inflow amount of the argon gas.